

IN THE SPECIFICATION:

Please insert the following heading after the title and before line 1 of page 1:

a'
--Background of the Invention--

Please replace the heading beginning at page 1, line 1, after the title with the following heading:

a2
--Field of the Invention--

Please replace the paragraph beginning at page 1, line 2, with the following rewritten paragraph:

a3
--The present invention relates to a magnetic bearing apparatus provided with a touchdown bearing made of a pair of roller bearings and a pair of corrugated plate-shaped damper members inserted into an annular gap formed between the touchdown bearing and its retainer member and to a vacuum pump having the magnetic bearing apparatus, and more particularly to an improvement in durability of a touchdown bearing and corrugated damper members for absorbing shock upon the touchdown and suppressing to a sufficiently low level a vibratory rotational frequency of a rotor relative to a rotational frequency of the rotor.--

Please replace the heading beginning at page 1, line 11, with the following heading:

Q⁴
--BACKGROUND INFORMATION--

Please replace the paragraph beginning at page 4, line 12, with the following rewritten paragraph:

Q⁵
--The present invention provides a magnetic bearing apparatus provided at least with a rotor shaft, a radial magnetic bearing for supporting the rotor shaft in a radial direction, a thrust magnetic bearing for supporting the rotor shaft in an axial direction, a touchdown bearing composed of a pair of roller bearings arranged at a lower end portion of the above rotor shaft, and a pair of corrugated plate-shaped damper members inserted into an annular gap between the touchdown bearing and its retainer member, and to a vacuum pump provided the magnetic bearing apparatus. An object of the present invention is to securely maintain the pair of corrugated plate-shaped damper member in a predetermined position.

Please replace the heading beginning at page 4, line 23, with the following heading:

Q⁶
--SUMMARY OF THE INVENTION--

Please replace the paragraph beginning at page 5, line 1, with the following rewritten paragraph:

Q¹ --In order to solve the above-noted problems, there is provided a magnetic bearing apparatus provided at least with a rotor shaft, a radial magnetic bearing for supporting the rotor shaft in a radial direction, a thrust magnetic bearing for supporting the rotor shaft in an axial direction, a touchdown bearing composed of a pair of roller bearings arranged to surround a lower end portion of the rotor shaft, a pair of corrugated plate-shaped damper members inserted into an annular gap disposed between the touchdown bearing and its retainer member and positional offset preventing means for preventing positional offset of the corrugated plate-shaped damper members disposed in the annular gap.--

Please insert the following paragraph beginning at page 6, before line 5:

Q⁸ --The present invention is also directed to a vacuum pump having the magnetic bearing apparatus according to the present invention.--

Please replace the heading beginning at page 7, line 4, with the following heading:

Q⁹

--DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS--

Please replace the paragraph beginning at page 7, line 5, with the following rewritten paragraph:

Q¹⁰

--Preferred embodiments of the present invention will now be described with reference to Figs. 1 to 7 in more detail.--

Please replace the paragraph beginning at page 8, line 17, with the following rewritten paragraph:

Q¹¹

--In Fig. 1 showing a first embodiment of the present invention, a cylindrical retainer member 9 serves as both the thrust bearing retainer member and the touchdown bearing retainer member. Namely, the retainer member 9 is the retainer member coated with resin mold and formed into a cylinder for receiving electromagnets constituting the thrust bearing 3a of Fig. 7. Then, the touchdown bearing 4, i.e., the pair of roller bearings 4a and 4b disposed in the upper and lower stages are received in the inner circumferential portion of the retainer member 9. The annular gap G is formed between the inner circumferential surface of the cylindrical

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could

retainer member 9 and the outer races of the pair of roller bearings 4a and 4b, a pair of corrugated strip steel plates 8a and 8b that form the corrugated plate-shaped damper members are inserted into this annular gap G, and a strip-like metal thin plate 10a is inserted while being clamped by the upper corrugated strip steel plate 8a and the lower corrugated strip steel plate 8b. The corrugated strip steel plates 8a and 8b are, for instance, the corrugated strip steel plates as shown in Fig. 6.--

Please replace the paragraph beginning at page 17, line 13, with the following rewritten paragraph:

Q¹²

--According to the present invention, there is provided a magnetic bearing apparatus provided at least with a touchdown bearing, a corrugated plate-shaped damper member inserted into an annular gap with a retainer member thereof and a positional offset preventing means for preventing the positional offset of the corrugated plate-shaped damper member in the annular gap. Accordingly, since the corrugated plate-shaped damper member is held in a predetermined position without fail even if it comprises a narrow corrugated strip steel plate, the corrugated plate-shaped damper member is prevented from being offset, thereby preventing abnormal contact between the rotor and the touchdown bearing. In